# ALUMINUM ELECTROLYTIC CAPACITORS

3.95mmL MAX. Chip Type







- Chip type with 3.95mmLMAX height.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine fed with carrier tape.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).
- AEC-Q200 compliant. Please contact us for details.



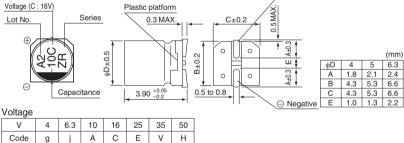


## ■Specifications

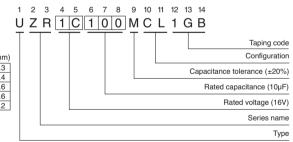
Item	Performance Characteristics									
Category Temperature Range	-40 to +85°C									
Rated Voltage Range	4 to 50V									
Rated Capacitance Range	1 to 220µF	I to 220μF								
Capacitance Tolerance	±20% at 120Hz	±20% at 120Hz, 20°C								
Leakage Current	After 2 minutes	After 2 minutes' application of rated voltage at 20°C, leakage current is not more than 0.01 CV or 3 (µA), whichever is greater.								
Tangent of loss angle (tan δ)	Rated voltage (V)		4	6.3	10	16	25	35	50	120Hz 20°C
	tan δ (MAX.)		0.50	0.30	0.24	0.19	0.16	0.14	0.14	
	Rated voltage (V)		4	6.3	10	16	25	35	50	120Hz
Stability at Low	Impedance ratio	Z-25°C / Z+20°C	7	4	3	2	2	2	2	
Temperature	ZT / Z20 (MAX.)	Z-40°C / Z+20°C	15	8	8	4	4	3	3	
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 85°C.  Capacitance change Within ±30% of the initial capacitance value tan δ 300% or less than the initial specified value Leakage current Less than or equal to the initial specified value							al specified value		
Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the specified values for the endurance characteristics listed above.									
Resistance to soldering heat	The capacitors are kept on a hot plate for 30 seconds, which is maintained at 250°C. The capacitors shall meet the characteristic requirements listed at right when they are removed from the plate and restored to 20°C.  Capacitance change Within ±10% of the initial capacitance tan δ Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than or equal to the initial specified tan δ Leakage current Less than δ Leakage c						to the initial specified value			
Marking	Black print on the case top.									

Positive





### Type numbering system (Example : $16V 10\mu F$ )



### ■ Dimensions

		4	6.3		10		16		25		35		50		
	V		4					1							
Cap. (µF) Code		0G		0J		1A		1C		1E		1V		1H	
1	010				į		ļ				į		į	4	8.4
2.2	2R2		į		i		į		į		į		į	4	13
3.3	3R3				!		 		!		!		!	4	17
4.7	4R7									4	16	4	18	5	20
10	100		į		i i		i i	4	23	5	27	5	29	6.3	i 33
22	220			4	28	5	33	5	37	6.3	42	6.3	46		l I
33	330	4	28	5	37	5	41	6.3	49	6.3	52				! !
47	470	4	33	5	45	6.3	52	6.3	58		I I		I I		l I
100	101	5	56	6.3	70										
220	221	6.3	96				į							Case size φD (mm)	Rated

Rated ripple current (mArms) at 85°C 120Hz

#### Frequency coefficient of rated ripple current

Trioquomoy coo	omeran or rated rippie editorit							
Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz or more			
Coefficient	0.70	1.00	1.17	1.36	1.50			

- Taping specifications are given in page 23.
- Recommended land size, soldering by reflow are given in page 18,19.
- Please refer to page 3 for the minimum order quantity.